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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/470,377	12/22/1999	MASATO NISHIKAWA	TAIYO40.001A	6066

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EXAMINER	
LESPERANCE, JEAN E	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/470,377	NISHIKAWA ET AL.	
	Examiner	Art Unit	
	Jean E Lesperance	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7-11,16-18,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7-11,16-18,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/22/1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on June 24, 2005 is entered and claims 1, 2, 7-11, 16-18, 21 and 22 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 7-10, 16-18, 21 and 22 are rejected under 35 USC 102 (e) as being unpatentable over US Patent # 6,198,475 ("Kunimatsu et al.").

As for claim 1, Kunimatsu et al. teach a display device for displaying operation function items (a display device Fig.2 (2)); a touch panel which is provided separately from the display device, said touch panel comprising a touch-operation face for selecting the function items by touch operation, wherein a touch-operation guide shape is formed with convex or concave ribs on said touch-operation face (a touch operation information Fig.2 (1) wherein the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave

portions or concavities 40 (Fig.9)) that are formed on the input pad 3 of the touch operation information output apparatus 1; control means for controlling said display device to display an image representing the touch-operation guide shape formed with the ribs of the touch-operation face of the touch panel, said image having substantially the same geometrical shape as the touch-operation guide shape formed with the ribs, wherein the operation function items are superposed on said image (the display device 2 includes a display mechanism 2a, of which a main component is a microcomputer which inherently has a control means where the microcomputer 23 is connected so as to receive the input of the on-off signals from the touch switch 14 and each operation switch 21 (column 4, lines 5-7) wherein button display portions 28a for navigation function selection are displayed at 8 points on edge portions of the map screen 28. These button display portions 28a correspond to the positions of the protruding brackets 4b and 4c among the protruding brackets 4 that exist at 8 points on both sides of the input pad 3, and blind operation of the button display portions 28a is possible by using the protruding brackets 4b and 4c (column 4, lines 32-39)) wherein the operation function items are superposed on said image.

As for claim 2, Kunimatsu et al. teach it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1.

As for claim 7, Kunimatsu et al. teach a display device for displaying operation function items (a display device Fig.2 (2)); a touch panel which is provided separately from the display device and which is for selecting the

function items y touch operation (a touch operation information Fig.2 (1) wherein the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1), the display device 2 includes a display mechanism 2a, of which a main component is a microcomputer which inherently has a control means where the microcomputer 23 is connected so as to receive the input of the on-off signals from the touch switch 14 and each operation switch 21 (column 4, lines 5-7) wherein the formation of concave portions or concavities (L and T) 40 (Fig.9) is designed to continuously extend in the upper side of the touch operation information and in the lower end side of the touch operation information.

As for claim 8, Kunimatsu et al. teach the formation of concave portions or concavities 40 (Fig.9) is designed to continuously extend in a predetermined in the upper side and lower side direction on the touch operation face of the touch operation information.

As for claim 9, Kunimatsu et al. teach the formation of concave portions or concavities 40 (Fig.9) is designed to continuously extend in a predetermined direction on the touch operation face of the touch operation information.

As for claim 10, Kunimatsu et al. teach the touch operation position with respect to the input pad 3 can be recognized by touching the protruded brackets 4a-4c by a finger. Accordingly, unlike the input pad 3 which has a planar

surface, the driver can perform a blind operation with respect to the touch operation information output apparatus 1 (column 4, lines 48-54).

As for claim 16, Kunimatsu et al. teach a display device Fig.2 (2); a touch operation information Fig.2 (1) wherein the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1.

As for claim 17, Kunimatsu et al. teach button display portions 28a for navigation function selection are displayed at 8 points on edge portions of the map screen 28. These button display portions 28a correspond to the positions of the protruding brackets 4b and 4c among the protruding brackets 4 that exist at 8 points on both sides of the input pad 3, and blind operation of the button display portions 28a is possible by using the protruding brackets 4b and 4c (column 4, lines 32-39) where the image being overlapped the operation function items .

As for claim 18, Kunimatsu et al. teach button display portions 28a for navigation function selection are displayed at 8 points on edge portions of the map screen 28. These button display portions 28a correspond to the positions of the protruding brackets 4b and 4c among the protruding brackets 4 that exist at 8 points on both sides of the input pad 3, and blind operation of the button display portions 28a is possible by using the protruding brackets 4b and 4c

(column 4, lines 32-39) wherein a relative position in the image and a relative position on the touch operation face correspond with each other.

As for claim 21, Kunimatsu et al. teach a display device for displaying operation function items (a display device Fig.2 (2)); a touch panel which is provided separately from the display device and which is for selecting the function items by touch operation, wherein a touch-operation guide shape is formed on the touch-operation face of said touch panel, said touch-operating guide shape is at least one of a convex shape and a concave shape (a touch operation information Fig.2 (1) wherein the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1 wherein the touch operation position with respect to the input pad 3 can be recognized by touching the protruded brackets 4a-4c by a finger), wherein at least on or of the convex shape and the concave shape is disposed at a center portion serving as a reference for determining a center position on the touch-operation face (a first group of protruding brackets that are in 4 positions at a center of the input pad are formed in a "+" shape (abstract)).

As for claim 22, Kunimatsu et al. teach a display device for displaying operation function items (a display device Fig.2 (2)); a touch panel which is provided separately from the display device and which is for selecting the function items by touch operation, wherein a touch-operation guide shape is formed on the touch-operation face of said touch panel, said touch-operating

guide shape is at least one of a convex shape and a concave shape (a touch operation information Fig.2 (1) wherein the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1); the display device 2 includes a display mechanism 2a, of which a main component is a microcomputer which inherently has a control means where the microcomputer 23 is connected so as to receive the input of the on-off signals from the touch switch 14 and each operation switch 21 (column 4, lines 5-7) wherein button display portions 28a for navigation function selection are displayed at 8 points on edge portions of the map screen 28. These button display portions 28a correspond to the positions of the protruding brackets 4b and 4c among the protruding brackets 4 that exist at 8 points on both sides of the input pad 3, and blind operation of the button display portions 28a is possible by using the protruding brackets 4b and 4c (column 4, lines 32-39) wherein the operation function items are superposed on said image.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 USC 103 (a) as being unpatentable over US Patent # 6,198,475 ("Kunimatsu et al.") in view of US Patent # 4,565,460 ("Kline").

As for claim 11, Kunimatsu et al. teach the touch operation position on the input pad 3 can be directly recognized by touching the protruded brackets 4a-4c by a finger and it is also acceptable to form concave portions or concavities 40 (Fig.9) that are formed on the input pad 3 of the touch operation information output apparatus 1. The prior art, Kunimatsu et al., teaches all the claimed limitations as recited in claim 11 with the exception of providing a recessed shape.

However, Kline teaches an alpha-numeric character, and where the embossment is of a sufficient height to allow touch recognition by a blind person, as best seen, for example, in FIGS. 4a, 4b, and 5c, or is formed with a recess having the shape of an alpha-numeric character (column 3, lines 62-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the alpha numeric character as taught by Kline in the touch operation disclosed by Kunimatsu et al. because this would contribute towards increasing the speed and accuracy of an operator of any key-operated or touch operated device or system.

Response to Arguments

4. Applicant's arguments filed June 24, 2005 have been fully considered but they are not persuasive. Applicant argued that the prior art does not teach "the

images 28a do not have substantially the same geometrical shape as the brackets 4b and 4c". Examiner disagrees with the applicant because as can be seen in the prior art, the rectangular shape of image 28a is the same as the rectangular shape seen in the input pad 3 of figure 1. Applicant argued that the prior art does not teach "plural continuously extending shape extend from one end side to another end side on the touch-operation face". Examiner disagrees with the applicant because the touch-operation of the prior where a finger can continuously extend over the shape of the touch panel since it is in one piece. Furthermore, applicant argued that the prior art does not teach "at least one of the convex shape and concave shape is disposed at the center portion on the touch-operation face". Examiner disagrees with the applicant because the prior art teaches that a first group of protruding brackets that are in 4 positions at a center of the input pad are formed in a "+" shape (abstract). Therefore, the rejection is maintained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is 571-272-7692. The examiner can normally be reached on from Monday to Friday between 8:OOAM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on 571-272-7603 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

Art Unit 2674

Date 8/30/2005

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER